



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Terrain Analysis

CIVILEN 5422

Credit Hours:

3.00 - 3.00

Course Levels:

Undergraduate (1000-5000 level)

Graduate (5000-8000 level)

Course Components:

Lecture

Lab

Course Description:

Principles and applications of photo pattern analysis, geologic and geomorphologic patterns, terrain studies, and land use suitability and capability mapping.

Prerequisites and Co-requisites:

Prereq: 2050 or Stat 3450, 3460, or 3470; or permission of instructor.

Course Goals / Objectives:

- Have knowledge of the interpretation of imagery for terrain analysis
 - Understand the range of landforms and their analysis
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Course Topics:

- Terrain analysis and landforms
 - Purpose, history and development of terrain analysis
 - Principles of airphoto interpretation, flight lines, stereo pairs, stereo viewing
 - Acquisition of aerial photographs
 - Definition of landforms – drainage patterns
 - Pattern element analysis – origin of pattern, geologic and water features – 3 hrs
 - Glacial and fluvial landforms, residual landforms, aeolian landforms
 - Terrain analysis applied to soil and water evaluations, landslide and avalanche prone areas, floodplains and wetlands
 - Soil maps and well logs
 - Database development and data acquisition
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Designation:

Elective